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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,349	11/27/2001	Shinichi Koriyama	81872.0028	1958
26021	7590	10/17/2005		
HOGAN & HARTSON L.L.P. 500 S. GRAND AVENUE SUITE 1900 LOS ANGELES, CA 90071-2611			EXAMINER MITCHELL, JAMES M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/996,349

Applicant(s)

KORIYAMA, SHINICHI

Examiner

James M. Mitchell

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/30/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This office action is in response to the information disclosure statement filed January 30, 2002.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 13, there is no antecedent basis for "the power line".

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al. (U.S. 5,982,250).

Huang (Fig. 3) discloses:

(cl. 10) a wiring board comprising: a dielectric board (208); a waveguide structure (234) penetrating the dielectric board from its surface to its reverse surface, having opening

shape (238), and having its inner wall coated a pre-determined cross-sectional with a conductor (236; Col. 5, Lines 3-7) ; and a high-frequency connecting pad (i.e. 210, 212,214, 216; Col. 6, Lines 11-15) provided around said waveguide structure on the surface of said dielectric board.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Flynn et al. (U.S. 6,232,849).

Flynn (Fig. 1, 2) discloses:

(cl. 10) a wiring board comprising: a dielectric board (10); a waveguide structure (14) penetrating the dielectric board from its surface to its reverse surface, having opening shape (32), and having its inner wall coated a pre-determined cross-sectional with a conductor (38) ; and a high-frequency connecting pad (42) provided around said waveguide structure on the surface of said dielectric board.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuriyama et al. (U.S. 6,239,669).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kuriyama (Fig. 24A-C) discloses:

- (cl. 1) a wiring substrate having a dielectric substrate having a high-frequency component (4) and a transmission line (6) formed on its surface, said dielectric substrate being formed with an opening (76) in a predetermined cross-sectional shape, a high-frequency and power connecting pad (77) coated with a conductor layer (83) around said opening being formed on a reverse surface of said dielectric substrate, a power pad being formed on the reverse surface of the dielectric substrate to be connected with a power line (i.e. conductor, not labeled, connected to wire shown in Fig. 24C) formed on the surface of the dielectric substrate, a matching section (i.e. area of slot, 8) for high-frequency coupling said transmission line and a waveguide structure connected to said high-frequency connecting pad to each other being formed in said opening;
- (cl. 2) with said pad is connected to waveguide by brazing material (Col. 6, Lines 25-27);
- (3) a cover (2) for hermetically sealing is attached to the surface of the dielectric substrate (Col. 4, Lines 65-67);
- (cl 4) and conducting pad of high frequency pad is hollowed inward from reverse surface (Fig. 24C);
- (cl. 5) substrate includes two or more high frequency connecting pads (i.e. item, 83 on item 7 serves as a pad; Fig. 24C);

(cl. 6) wherein said transmission line is microstrip line (Col. 5, Lines 10-17);

(cl.7) wherein there is a slot hole (8) at center of opening of said frequency connecting pad, a vertical conductor (i.e. portion of 83 in opening) and matching section is enclosed by vertical conductors;

(cl. 8) and the dielectric is ceramic (Col. 14, Line 47).

With respect to the intended use limitation of a power pad or transmission line, the prior art forms the same structure as applicants whose pad and lines are conductive a material. Therefore, the limitation does not impart patentability, since it has been held that the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Allowable Subject Matter***

Claims 11-19 are allowable.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or make obvious connecting the high frequency and power pads to a wiring board by a brazing material with a waveguide structure coupled to said high frequency connecting pad including all the limitations of the independent claim.

### ***Conclusion***


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jmm  
October 1, 2005

  
CARL WHITEHEAD, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2900